

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/815,650	04/02/2004	Shinji Moriyama	251290US0	8195	
22850	7590 10/11/2006		EXAM	EXAMINER	
C. IRVIN MCCLELLAND			DOTE, JANIS L		
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET			ART UNIT	PAPER NUMBER	
ALEXANDE	ALEXANDRIA, VA 22314 1756 DATE MAILED:		1756		
			DATE MAILED: 10/11/2006	5	

Please find below and/or attached an Office communication concerning this application or proceeding.



Commissioner for Patents United States Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450 www.uspto.gov

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/815,650 Filing Date: April 02, 2004

Appellant(s): MORIYAMA ET AL.

Harris A Pitlick For Appellant MAILED OCT 1 1 2006 GROUP 1700

EXAMINER'S ANSWER

This is in response to the appeal brief filed Jun. 23, 2006, appealing from the Office action mailed Mar. 29, 2006.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

Art Unit: 1756

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is incorrect.

The amendment after final rejection filed on Jun. 23, 2006, has been entered.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

¹ See the Advisory action mailed on Sep. 25, 2006. The objection to the specification in the final rejection, paragraph 4, has been withdrawn.

Art Unit: 1756

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is substantially correct. The changes are as follows:

In Ground (A), the reference Diamond, <u>Handbook of Imaging</u>

<u>Materials</u>, pp. 160-163 is used, not the reference Schaffert,

<u>Electrophotography</u>, page 604, Fig. 248. See the final rejection mailed on Mar. 29, 2006, paragraph 6.²

Accordingly, the correct ground of rejection in Ground (A) should be:

Claims 1-3, 5, 9, and 10 stand rejected under 35 U.S.C.

103(a) is over Japanese Patent 61-203463 (Machida), as evidenced by Grant & Hackh's Chemical Dictionary, page 14, Diamond,

Handbook of Imaging Materials, pp. 160-163, and applicants' admission at page 3, lines 10-16, page 11, line 23, to page 12, line 1, and in Table 1 at page 22, of the instant specification (applicants' admission I).

 $^{^2}$ The amendment to claim 10 filed on Oct. 27, 2005, necessitated the replacement of the Schaffert reference cited in the first office mailed on Jun. 28, 2005, paragraph 9, with the Diamond reference in the final rejection.

Art Unit: 1756

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

61-203463	MACHIDA (Japan)	09-1986
6,383,705 B2	AOKI	05-2002
5,079,123	NANYA	01-1992

USPTO English-language translation of JP 61-203463.

Grant, R., et al., ed., <u>Grant & Hackh's Chemical</u>

<u>Dictionary</u>, fifth edition, McGraw-Hill Book Company, NY (1987),
p. 14.

Diamond, A.S., ed., <u>Handbook of Imaging Materials</u>, Marcel Dekker, Inc., NY (1991), pp. 160-163.

Applicants' admissions at page 3, lines 10-16, page 11, lines 23, to page 12, line 1, and in Table 1 at page 22, of the instant application (applicants' admission I).

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Art Unit: 1756

GROUND (A)

Claims 1-3, 5, 9, and 10 are rejected under 35

U.S.C. 102(b) as anticipated by or, in the alternative, under

35 U.S.C. 103(a) as obvious over Japanese Patent 61-203463

(Machida), as evidenced by Grant & Hackh's Chemical Dictionary,

page 14, Diamond, Handbook of Imaging Materials, pp. 160-163,

and applicants' admission at page 3, lines 10-16, page 11,

line 23, to page 12, line 1, and in Table 1 at page 22, of the

instant specification (applicants' admission I).

See the USPTO English-language translation of Machida for cites.

Machida discloses a toner comprising 100 parts by weight of a polyester binder resin, an offset prevention agent, and 6 parts by weight of the activated carbon associated with the tradename "Shirawashi A-1" obtained from Takeda Pharmaceutical Industries K.K. The activated carbon has an average particle diameter of 4.5 μm. Translation, Working example 1, toner (1) at page 8 and in Table 3 at page 12. Machida further discloses a two-component developer comprising toner (1) and a magnetic carrier. Translation, page 10, lines 11-13. The 4.5 μm average particle size is within the numerical value of the particle size range of "5.6 μm or less" recited in instant claim 1. The

Art Unit: 1756

amount of the activated carbon is within the amount range recited in instant claim 3.

Machida further discloses a toner image forming process that comprises the step of developing an electrostatic image with its toner. Translation, page 2, lines 8-10. Machida discloses that its two-component developer is used in a commercially available copier manufactured by Minolta Camera Co., Ltd., that comprises a selenium photosensitive member. Translation, page 11, lines 2-7. It is well known in the electrophotographic arts that commercially available copiers form electrostatic latent images on the photosensitive member that are developed with a developer, where the developer can be a two-component developer comprising a toner and a carrier or a single component developer comprising a toner. See Diamond, Handbook of Imaging Materials, Fig. 4.1(c) on page 161, and section 4.1.3 at pp. 162-163. Thus, the Machida image forming process develops an electrostatic latent image with its twocomponent developer as recited in instant claim 10.

Machida does not identify the activated carbon as a charcoal as recited in the instant claims. However, it is well known in the chemical arts that activated carbon is "charcoal produced by the destructive distillation of vegetable manner, e.g., nutshells . . ." See Grant & Hackh's Chemical Dictionary,

Art Unit: 1756

page 14. Thus, it is reasonable to conclude that the Machida activated carbon is a charcoal as recited in the instant claims.

Machida does not identify the 4.5 µm average particle size of the activated carbon associated with the tradename "Shirawashi A-1" as a volume-based median particle size as recited in instant claim 1. Nor does Machida disclose that the activated carbon has a "coefficient of variation of 80% or less" as recited in instant claim 1. However, as discussed above, the Machida 4.5 µm average particle size is within the numerical value of particle size range of "5.6 μm or less" recited in instant claim 1. Machida shows that toner (1) exhibited stable chargeability for 10 hours. Translation, Table 1 at page 10. Toner (1) provided images with "excellent" fine line reproducibility, and with no occurrence of fogging after 50,000 copies. Translation, Table 2 at page 11, and the accompanying text at page 12, lines 1-2; and Table 3 at page 12. These are the properties sought by applicants. The instant specification discloses that when the volume-based median particle size of the charcoal powder is larger than 5.6 µm, "it is difficult to contain the charcoal powder in the toner. When the coefficient of variation exceeds 80%, the state of dispersion of the charcoal powder in the toner is inhomogeneous. Therefore, when these requirements are not satisfied, not only

Art Unit: 1756

the degree of . . . blackness and the covering strength [are] considerably lowered but also the chargeability is adversely affected, thereby resulting in the lowering of the image quality." Instant specification, page 3, lines 10-16. instant specification shows that a toner comprising a charcoal powder having a volume-based median particle size greater than 5.6 µm and a coefficient of variation of greater than 80% provides images with "poor" thin-line reproducibility and background fogging; while toners comprising the charcoal powder that possesses the particle size and coefficient of variation within the scope of instant claim 1 provided images with "good" thin-line reproducibility and low occurrence of background fogging. Instant specification, Table 1 at page 22, examples 1-4 and comparative example 1. Thus, because the Machida toner (1) exhibits the properties sought by applicants, it is reasonable to presume that the Machida activated carbon has a volume-based median particle size and a coefficient of variation as recited in instant claim 1. The burden is on applicants to prove otherwise. In re Fitzgerald, 205 USPQ 594 (CCPA 1980).

Machida also does not disclose that toner (1) has a dielectric loss tangent of 0.01 or less as recited in instant claim 5. The instant specification discloses that the

Art Unit: 1756

"dielectric loss tangent of the toner is preferably from 0.001 to 0.1 . . . from the viewpoint of the printed image quality, especially the background fogging, which is affected by the dispersibility of the charcoal powder in the toner."

Instant specification, page 11, line 23, to page 12, line 1.

As discussed <u>supra</u>, the Machida toner (1) provided images with no occurrence of fogging after 50,000 copies, which is the property sought by applicants. Translation, Table 3 at page 12.

Accordingly, it is reasonable to presume that the Machida toner has a dielectric loss tangent of 0.01 or less as recited in instant claim 5. The burden is on applicants to prove otherwise. Fitzgerald, supra.

GROUND (B)

Claim 4 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Machida, as evidenced by Grant & Hackh's Chemical
Dictionary, page 14, and applicants' admission I.

See the USPTO English-language translation of Machida for cites.

Machida, as evidenced by <u>Grant & Hackh's Chemical</u>

<u>Dictionary</u>, page 14, and applicants' admission I, discloses a toner as described in Ground (A) above, which is incorporated

Art Unit: 1756

herein by reference. According to Machida, because activated carbon has a high surface electric resistance and "low cohesibility," it has good dispersion properties. Translation, page 3, lines 23-25. When the dispersion characteristics are improved, uniform charging is obtained and toner scattering is reduced. The "gradation reproducibility of the image texture is improved, and unevenness in the half-tone areas is eliminated." Translation, page 3, line 25, to page 4, line 3.

Machida does not identify from what source the activated carbon associated with tradename "Shirawashi A-1" is obtained. However, Machida discloses that the activated carbon used in the invention "may be any type of activated carbon such as coconut shells, wood carbon, etc." Translation, page 4, line 4-5. Because Machida explicitly names only two sources of activated carbon, it is reasonable to presume that the activated carbon associated with tradename "Shirawashi A-1" is obtained from either coconut shells or wood carbon. The burden is on applicants to prove otherwise.

Alternatively, it would have been obvious for a person having ordinary skill in the art to use an activated carbon obtained from coconut shells or wood carbon in the toner disclosed by Machida. That person would have had a reasonably

Art Unit: 1756

expectation of successfully using activated carbon, based on the known properties of activated carbon disclosed by Machida.

GROUND (C)

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Machida, as evidenced by Grant & Hackh's Chemical Dictionary, page 14, and applicants' admission I, combined with US 6,383,705 B2 (Aoki).

See the USPTO English-language translation of Machida for cites.

Machida, as evidenced by <u>Grant & Hackh's Chemical</u>

<u>Dictionary</u>, page 14, and applicants' admission I, discloses a toner as described in Ground (A) above, which is incorporated herein by reference.

Machida does not exemplify a toner comprising the polyester resin recited in instant claim 6. However, Machida teaches that the toner binder resin may be "any material already used as a binder resin for toners . . [which] include[s] . . . polyester resins." Translation, page 4, line 25, to page 5, line 1.

Aoki discloses a toner binder resin comprising crystalline polyester resin **A** having a softening point of 127.3°C and amorphous polyester resin **d** having a softening point of 100°C.

Art Unit: 1756

Tables 1 and 2 at cols. 7-10 and Table 3 at col. 10, example 1. Polyester resin **A** and polyester resin **d** meet, respectively, the high softening point and low softening point polyesters recited in instant claim 6. According to Aoki, a toner comprising said binder resin has excellent low temperature fixing ability, offset resistance, blocking resistance, and pulverizability. Col. 1, lines 55-58, and Table 4 at col. 12, example 1.

It would have been obvious for a person having ordinary skill in the art, in view of the teachings of Aoki, to use the toner binder resin in example 1 of Aoki as the binder resin in toner (1) of Machida. That person would have had a reasonable expectation of successfully obtaining a toner that has excellent low temperature fixing ability, offset resistance, blocking resistance, and pulverizability, as disclosed by Aoki.

GROUND (D)

Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Machida, as evidenced by <u>Grant & Hackh's</u>

<u>Chemical Dictionary</u>, page 14, and applicants' admission I, combined with US 5,079,123 (Nanya).

See the USPTO English-language translation of Machida for cites.

Application/Control Number: 10/815,650

Art Unit: 1756

Machida, as evidenced by <u>Grant & Hackh's Chemical</u>

<u>Dictionary</u>, page 14, and applicants' admission I, discloses a toner as described in GROUND (A) above, which is incorporated herein by reference.

Machida does not exemplify a toner comprising a low-melting point wax as recited in instant claims 7 and 8. However,

Machida does not limit the type of offset prevention agent used in its toner. Translation, page 6, line 25, to page 7, line 2.

According to Nanya, a polyolefin wax, such as a low-molecule weight polypropylene, "can impart to the toner high resistance to the off-set phenomenon, but cannot sufficiently improve the fixing ability [of the toner] at low temperatures."

Col. 1, lines 55-60. Nanya further discloses that toners comprising a conventional carnauba wax as a release agent have both high resistance to the off-set phenomenon and excellent fixing ability at low temperatures. Nanya, col. 1, lines 61-63. However, said toners do not have high resistance to the winding phenomenon and cause toner filming. Nanya, col. 1, lines 64-65, and col. 2, line 7. Nanya discloses that carnauba wax, which comprises generally from 3 to 4 wt% of free aliphatic acids, cannot be thoroughly dispersed in the toner binder resin.

Therefore, the wax tends to separate from the toner during the development process. Nanya, col. 2, lines 3-7, and 38-39.

Art Unit: 1756

Nanya discloses that a carnauba wax "substantially free of aliphatic acids" overcomes the above problems. See carnauba wax B in example 2 of Nanya, which comprises 0.7 wt% of free aliphatic acids and has a melting point of 84°C, which is within the range of 50 to 120°C recited in instant claim 7. Nanya further discloses that the content of the aliphatic acids in the carnauba wax is preferably less than 1 wt%. Nanya, col. 2, lines 14-34, and 44-45. Nanya discloses that due to the removal of the aliphatic acids, the size of the wax crystal decreases to 1 µm or less, when dispersed in the binder resin, which is said to be much smaller than that of conventional carnauba wax. Nanya discloses that for this reason a toner comprising the carnauba wax substantially free of aliphatic acids is free from the previously-mentioned filming problems, and exhibits high resistance to both off-set and winding phenomena. Col. 2, lines 46-57.

It would have been obvious for a person having ordinary skill in the art, in view of the teachings of Nanya, to use carnauba wax B taught by Nanya as the offset prevention agent in toner (1) of Machida. That person would have had a reasonable expectation of successfully obtaining a toner that exhibits improved resistance to off-set, winding phenomena, and filming.

Art Unit: 1756

(10) Response to Argument

GROUNDS (A) through (D)

Appellant asserts that "no prima facie case has been made out" that the Machida toner (1) comprises an activated carbon that meets the CV (coefficient of variation) limitation of 80% or less recited in the instant claims because "it is impossible to determine to verify that Machida's toner (1) does, in fact, meet the CV limitation." (The coefficient of variation is defined as the [(standard deviation/ D_{50}) x 100], where D_{50} is the volume-based median particle size of the charcoal powder. See the instant specification, page 13, lines 19-21.) Appellant asserts that Machida does not disclose how its toner (1) is prepared. Appellant asserts that "a prerequisite for inherent anticipation is that the claimed invention be enabled by the prior art." Appellant cites the showing in the Rule 132 declaration, executed by Shinji Moriyama on Oct. 25, 2005, and filed on Oct. 27, 2005, which is listed in "Evidence Appendix" of brief (the Moriyama declaration), for support of his assertions. The Moriyama declaration states that "it is presumed that the Shirasagi A-1^[3] was pulverized so as to be

³ Moriyama declaration states that the actual product used in Machida is "Shirasagi A-1" from Japan EnviroChemicals, Ltd, not "Shirawashi A-1" from Takeda Pharmaceutical Industries K.K. as disclosed in the USPTO translation. On the present record, there is no reason to think that the actual name or source makes a difference.

Art Unit: 1756

adjusted to have the desired particle size used. The coefficient of variation (CV) value can be freely adjusted by conditions of pulverization so that the CV value of the charcoal powder used in the examples of Machida cannot be assumed."

Appellant further asserts that "Machida is insufficiently disclosed with regard to CV and one skilled in the art practicing Machida would be without a clue regarding any significance of CV."

Appellant's assertions are not persuasive. As discussed in the final rejection, appellant's assertion of the inability to determine the coefficient of variation value (CV) of the charcoal powder used in Machida is not persuasive. Any competitor using a similar toner would, if the instant claims were patented, need to determine whether their toner comprising a charcoal powder has a CV of 80% or less in order to avoid infringement. In the same way, it is the appellant's burden to distinguish his claimed toner from prior art toners that are sufficiently similar that a reasonable presumption arises that they are the same. Appellant is in the best position to come forward with objective evidence to rebut the presumption that the Machida toner (1) comprises a charcoal powder having a CV as recited in the instant claims. Compare In re Spada, 15 USPQ2d 1655, 1659 (Fed. Cir. 1990).

Art Unit: 1756

Furthermore, for the reasons discussed in the rejection in Ground (A), the evidence of record supports the presumption because Machida exemplifies a toner that appears to meet the CV limitation of 80% or less recited in instant claim 1. Machida teaches how to make the toner (1). See the translation, working example 1. The statements in the Moriyama declaration are merely conclusory; they are not supported by creditable evidence. Machida states that the activated carbon has an average particle size of 4.5 μm . The Moriyama declaration presumes that particle size of the Machida activated carbon is achieved by pulverizing the activated carbon before making the toner (1). Thus, regardless of Machida's lack of disclosure of the coefficient of variation (CV) of the its activated carbon particle size, appellant appears to know how to obtain the Machida activated carbon average particle diameter of 4.5 μm from the commercial product used in Machida and how to make the Machida toner (1). Appellant has not provided any evidence to show why the CV of the Machida activated carbon, roughly, the width of distribution of particle diameters about the volume . average particle size, D₅₀, cannot be determined once the Machida toner (1) is reproduced.

Moreover, as discussed in the final rejection, the showing in the Moriyama declaration does not appear to be a probative

Application/Control Number: 10/815,650

Page 19

Art Unit: 1756

comparison to Machida. Comparative example 1 in the declaration exemplifies a toner comprising a charcoal powder having a particle size of 5.59 µm and a CV of 88.2% and a particular binder resin. According to the declaration, the toner in comparative example 1 produced images with "poor" background fogging and "poor" thin-line reproducibility. However, as discussed in the rejection in Ground (A) above, the Machida toner (1) in example 1 of Machida comprises an activated carbon powder having an average particle diameter of 4.5 μm . discussed in the rejection in Ground (A) above, the Machida toner (1) reportedly provided images with no occurrence of fogging after 50,000 copies and with "excellent" fine line reproducibility. Thus, even if the evaluations used in Machida were not identical to those used in the instant specification, the preponderance of evidence shows that the toner in comparative example 1 does not provide the images provided by the Machida toner (1). As noted by appellant in their response filed on Oct. 27, 2005, Machida teaches that the particle size of its activated carbon should be approximately 5 µm or less. Translation, page 4, lines 5-7. Machida also shows that toners comprising an activated carbon powder having an average particle size of 7.5 µm or 10 µm provided images with slight occurrence of fogging after 40,000 copies and occurrence of fogging after

Art Unit: 1756

10,000 copies, respectively. Translation, Table 3 at page 12. Machida states that "it can be seen that . . . in toners . . . which used particles greater than 5 µm, fogging and filming occurred. Accordingly, the average particle diameter of the activated carbon in the present invention should be no more than 5 µm." Translation, page 13, lines 3-6. Thus, it appears that Machida teaches away from the toner exemplified in comparative example 1 in the declaration. Accordingly, comparative example 1 in the declaration does not appear to be a probative example to Machida.

In reply, appellant asserts that "Machida describes the particle diameter be approximately 5 μm or less." Appellant asserts that the data in Machida says nothing about a particle diameter of 5.59 μm , as used in the Moriyama declaration, which appellant submits is approximately 5 μm .

Appellant has not provided any evidence to show that Machida intended the particle size of "approximately 5 µm or less" to include 5.59 µm. In fact, as discussed supra, Machida teaches that 5 µm is an upper limit to the average particle size range. Based on the facts in Machida, a person having ordinary skill in the art would have not reasonably concluded that an average particle size of 5.59 µm would be within the Machida

Application/Control Number: 10/815,650

Art Unit: 1756

average particle size range of "approximately 5 μm or less," as submitted by appellant.

Appellant further asserts that no comparison can be probative to Machida because "Machida discloses nothing about CV, and it is impossible to determine what the CV was of Machida's activated carbon."

However, appellant is not relieved of his burden of distinguishing the claimed invention from Machida by Machida's silence as to the CV of its activated carbon powder. Appellant teaches, as set out in the rejection (pages 8 and 9, supra) that small particle size (5.6 µm or less) and a CV of 80% or less are responsible for the toner's blackness, covering strength, and chargeability - and ultimately, its ability to provide high quality images. Machida's disclosure of stable chargeability, small sized particles, and superior image quality suffices to shift the burden of distinguishing the Machida toner from the claimed toner to appellant. Such a comparison is not only probative - it is required. See Spada, supra.

Appellant asserts that "it is not proper for the Examiner to equate qualitative expressions of results, such as 'good' and 'poor' thin-line reproducibility between the specification herein, and the prior art, to find that means to obtain the results are quantitatively the same, such as a CV of 80% or

Art Unit: 1756

less." Appellant asserts that there is no indication that the respective standards of measurement for the present invention and Machida are the same. Appellant also asserts that it is not proper to use appellant's comparative data, which is not prior art, against him.

However, as discussed in the final rejection, the examiner is merely using the available evidence of record to determine whether or not it is reasonable to transfer the burden to appellant to distinguish over prior art toners. Such prior art toners are deemed to be the ones that meet all of the expressed structural and compositional limitations in the claims, and that disclose properties that are consistent with the properties taught by appellant as advantages due to a CV of 80% or less. Patents for compositions of matter are not properly issued for the discovery of a previously unknown or unrecognized property of an old material.

Appellant reiterates that it is not proper to rely on evidence of record that is not prior art or an admission of prior art. Appellant further asserts that the examiner did not answer the argument that qualitative expressions of results cannot be relied on when there is no indication of any similarity in the respective standards of measurement.

Application/Control Number: 10/815,650

Art Unit: 1756

However, for the reasons discussed above, it is proper to look to the instant specification in ascertaining what properties are obtained by the toner recited in the instant claims, and thereby determining whether or not the preponderance of the evidence indicates that prior art toners possess said properties.

Furthermore, although the methods of determining "fogging" and "thin-line reproducibility" in the instant specification are not the same as those used in Machida, a person having ordinary skill in the art would have recognized that the results in Machida could be compared with those reported in the instant specification. As discussed supra, the Machida toner (1) reportedly provided images with no occurrence of fogging after 50,000 copies. The instant specification at page 21, lines 10-12, discloses that when the background fogging (BG) is determined by the method disclosed at page 21, the allowable BG level is "0.7 is less. When the value exceeds 0.7, the background fogging [BG] by the toner can be visually recognized." Thus, it appears that the Machida toner (1) provided images with a background fogging (BG) of less than 0.7 because fogging is not visually recognized. Appellant has not explained why the Machida result of "no occurrence" of fogging

Art Unit: 1756

cannot be equated or compared with the BG results of "low occurrences" disclosed in the instant specification.

In addition, in the instant specification, the "thin-line reproducibility" is evaluated by visually observing the printed state of a thin-line portion in a printing pattern. See the instant specification, page 21, lines 15-16. The instant specification labels the thin-line portion shown in the Fig. 2 electron micrograph, which appears to be within a 0.4 mm square, as "good," and the thin-line portions in the Figs. 3 and 4 electron micrographs, which appear to outside a 0.4 mm square, as "poor." See the instant specification, page 2, lines 15-20, and Table 1 at page 22, which reports the "thin-line reproducibility" results for example 1 and comparative examples 1 and 3. On the other hand, Machida evaluates the "fine line reproducibility" of a printed pattern using a "chart AR-4 manufactured by Dataquest Co." Translation, page 11, lines 13-14. According to Machida, the Machida toner (1) provided a pattern with "fine line reproducibility," i.e., (lines/mm) of 9.0. Translation, Table 2, working ex. 1. In other words, the lines had a maximum line width of less than about 0.11 mm. Thus, it would appear that a line width of less than about 0.11 mm would be labeled as "good" as evaluated by instant specification. Thus, even if the evaluations used in

Art Unit: 1756

Machida were not identical to those used in the instant specification, a person having ordinary skill in the art would have recognized that the Machida toner (1) appears to exhibit the properties sought by appellant.

Thus, for the reasons discussed above and in the rejection in Ground (A) above, it is reasonable to presume that the Machida toner (1) comprises an activated carbon having a volume-based median particle size and a coefficient of variation (CV) as recited in instant claim 1. Appellant has not met his burden to show otherwise.

Accordingly, the examiner's rejections over Machida should be affirmed.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

Art Unit: 1756

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

JANIS L. DOTE
PRIMARY EXAMINER
GROUP 1500 1700

JLD

Sep. 25, 2006

Conferees:

Mark Huff, SPE of Art Unit 1756

Jennifer Kolb-Michener, TC 1700 Appeals Specialist

Harris A. Pitlick
OBLON, SPIVAK, McCLELLAND, MAIER & NEUSTADT, P.C.
1940 Duke Street
Alexandria, VA 22314
(703)413-3000